

Basics of Ergonomics

Audience: All industrial workers

Average Training Time: 30 to 45 minutes

US Code of Federal Regulation Reference: CD-ROM (MPEG Video)/ *CLEEBMPG*

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Produced by: Mastery Technologies, Inc.

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OVERVIEW

If you mention on-the-job injuries, people are likely to think of accidents that involve traumatic injuries, such as fractures, burns, or other clearly visible damage to the human body. But in fact, the fastest-growing category of workplace injuries involves damage that is much harder to see; injuries caused by repetitive motion and stress.

In today's highly complex, rapidly changing business environment, people in all types of work are at greater risk for these types of injuries. In a recent year over 281,000 work-related injuries in the United States were caused by repetition disorders—more than double the number reported four years earlier. The most common types of injuries are Cumulative Trauma Disorders (CTDs).



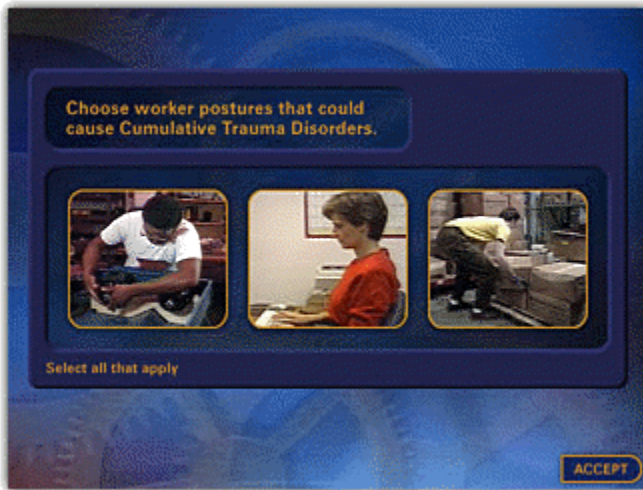
Workplaces traditionally have been designed to move products or support machines efficiently. Since people have always seemed so adaptable, how they fit into the workplace has received less attention. But because of the increasing number of injuries caused by repetitive motion, excessive force and awkward postures, ergonomics has become a critical factor in workplace safety.

A solid ergonomics program can provide several benefits to your organization, including:

- Reduced CTDs
- Reduced severity of the CTDs that do occur
- Reduced costs of workers' compensation, medical bills, and lost workdays
- Increased productivity and quality

- Improved morale
- Improved work conditions

“Basics of Ergonomics” will help your workers understand ergonomics, they will learn the risk factors and how they are controlled. Your workers will be prepared to apply ergonomic concepts to their jobs and to actively support and contribute to your company’s ergonomic program. Eighteen interactive activities keep your workers involved in the instruction, assess their mastery of the key concepts, and ensure that all needed remedial instruction is received.



TOPICS

The course presents interactive instruction covering the following topical areas:

What Is Ergonomics?

- Defining Ergonomics
- Cumulative Trauma Disorders

Risk Factors

- Types of Risk Factors
- The Cumulative Effect

Ergonomic Improvements

- Basic Principles
- Neutral Body Movements
- Incorporating Changes
- Quick Fixes

The Ergonomic Program

- Elements of the Ergonomic Program

PERFORMANCE OBJECTIVES

This course will measure mastery on each of the following performance objectives. Upon completion, workers will be able to...

Explain the concept of ergonomics

1. Define ergonomics.



2. Identify the basic principle of ergonomics.
3. Describe how ergonomics reduces risk factors.

Recognize Cumulative Trauma Disorders

1. List symptoms of cumulative trauma disorders.
2. Recall that CTDs develop over time.

Recognize ergonomic risk factors

1. List three types of ergonomic risk factors.
2. Identify repetition as the risk factor associated with doing the same movement over and over.
3. Identify force as the risk factor associated with extra physical effort to perform a task.
4. Identify posture as the risk factor associated with working in non-neutral body positions.
5. Analyze posture for possible risk factors.
6. Agree that an occasional awkward position does not necessarily cause harm.
7. List items that are considered risk factors.

Maintain neutral body movements to reduce risks

1. Define “neutral body movements”.

Use quick fixes to reduce risk factors

1. Differentiate between quick fixes and big fixes.
2. Agree that work should be close to the body and at elbow height.
3. Select quick ergonomic solutions from a list.

Participate in your company’s Ergonomic Program

1. Describe an Ergonomic Program.
2. Identify the possible processes an employee may be involved in.